

Application No. 09/696,526
Amendment dated January 28, 2005
Reply to Office Action dated October 28, 2004

REMARKS/ARGUMENTS

Claims 1-36 are pending in this application. Claims 10, 16, 18 and 19 are allowed. The Examiner has rejected claims 1-9, 11-15, 17 and 20-36. The Applicants have amended claims 1, 9 and 17 herein. The Applicants have carefully reviewed the Examiner's rejections, and respectfully traverse the Examiner's rejections. The Applicants assert that the claim amendments provided herein further clarify the invention and address the Examiner's rejections presented in the Final Office Action. Reconsideration and allowance of the pending claims are requested for the reasons detailed below.

Novelty

1. Claim 1

The Examiner rejected claims 1-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33 as being anticipated by *Micheron*. The Applicants respectfully traverse the Examiner's rejection.

First, the Examiner notes the Applicants' argument that *Micheron* fails to disclose two electroactive layers wherein one layer is of non-uniform thickness. The Examiner then rejects that argument stating, "*Micheron* clearly shows in fig.1 two electroactive polymer wherein, one layer (2) is of non-uniform thickness." However, the Applicants respectfully assert that a careful reading of *Micheron* shows that neither electroactive layer 1 or 2 is of non-uniform thickness.

In examining Figs. 1-3 of *Micheron*, the Applicants draw the Examiner's attention to the two electroactive layers (1) and (2) in Figs. 1 and 2 and layers (1) and (20) in Fig. 3. These layers consist of two dielectrics (1) and (2) in Figs. 1 and 2 and two dielectrics (1) and (20) in Fig. 3 made from polymer materials in sheet form. See col. 3, lines 4-6; col. 3, line 22 and line 29; and col. 3, lines 46-47. The two dielectrics are mechanically

Application No. 09/696,526

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coupled by a connection ensuring the transmission of the tangential forces of dielectric 1 to dielectric (2) or (20), as applicable. See col. 3, lines 11-15 and col. 3, lines 48-50. Although layer (1) and layer (2) in Fig.1 are illustrated as two different thicknesses, there is no teaching in *Micheron* that layer (2) or layer (1) is of a non-uniform thickness - either along its length or across its width. Layer (1) is a constant thickness and layer (2) is a constant thickness. Applicants agree that layer (1) and layer (2) are different thicknesses. Neither layer (1) nor layer (2), however, is itself of non-uniform thickness - which is what the Applicants are claiming. Nowhere in *Micheron* is non-uniform thickness of an electroactive layer taught. Additionally, measurement of the thickness of layer (2) in Fig. 1 confirms that layer (2) has a constant thickness along its length. A review of *Micheron* indicates that in no instance does the thickness of any electroactive layer vary. Fig. 1 shows the uniform thickness electroactive dielectric layers 1 and 2 separated by an electrode 5. See col. 3, line 4-18. Again, in this illustration it is clear that even if the layers (1) and (2) were of different individual thicknesses, their thickness does not vary as a function of width or length. The Examiner states that the Applicant "does not include that the thickness of the layer is a function of the width or length." Applicants assert that such limitation is clearly stated via claim 1's language, "non-uniform thickness." Although Applicants assert the claim language is clear, Applicants have amended claim 1 to provide additional clarity. Figs. 2 and 3 show similar configurations of dielectric sheets and electrodes.

The Applicants respectfully submit that *Micheron* neither anticipates nor teaches the subject matter of claim 1. Claim 1 clearly states "wherein at least one layer of electroactive material is of non-uniform thickness." Because there is no such teaching in *Micheron*, the Applicants assert that claim 1 is allowable. The Applicants have also amended claims 9 and 17 to provide additional clarity.

Application No. 09/696,526
Amendment dated January 28, 2005
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2. Rejection of the Dependent Claims 2-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33

The Examiner further rejected dependent claims 2-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33 as being anticipated by *Micheron*.

Because these claims are dependent on claim 1 and because claim 1 is allowable as asserted above, the Applicants respectfully assert that these dependent claims are also allowable. Accordingly, the Applicants respectfully request reconsideration of the rejections to dependent claims 2-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33 and that these rejections be withdrawn.

Obviousness

The Examiner rejected claims 4, 15, 24, 28, 29, 34-35 under 35 U.S.C. 103(a) as being unpatentable over *Micheron* in view of *Pelrine*.

The Examiner asserts, with respect to claim 4, that *Micheron* "discloses in fig. 3 an electroactive device comprising two layers (1,2) of material with layer 2 of non-uniform thickness bonded together by polymer epoxy glue." The Examiner further states that *Micheron* inherently discloses means for bonding, but does not disclose polymer electrodes. The Examiner relies on *Pelrine* for disclosing polymer electrodes for the purpose of providing compliant electrical connections.

The Examiner's assertion that claims 4, 15, 24, 28, 29 and 34-35 are obvious relies on *Micheron*'s teaching of an electroactive device comprising an electroactive layer of non-uniform thickness. As argued above, the Applicants assert that there is no Figure or portion of the specifications in *Micheron* which makes such teaching. Applicants note that M.P.E.P. §2143.03 provides that "if an independent claim is non-obvious under 35 U.S.C. §103, then any claim depending therefrom is non-obvious." In re Fine, 837 F.2d 1071, 5USPQ2d 1596 (Fed. Cir. 1988). Because these claims are dependent on claim 1 and because claim 1 is allowable as asserted above, the Applicants respectfully assert that

Application No. 09/696,526
Amendment dated January 28, 2005
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these dependent claims are also allowable. Accordingly, the Applicants respectfully request reconsideration of the rejections to dependent claims 4, 15, 24, 28, 29, 34-35.

Additionally, the Applicants respectfully bring to the Examiner's attention several instances of reference to *Schaff* within the 35 U.S.C. § 103 rejections. The Applicants' understanding, as previously provided, is that the Applicants' prior arguments with respect to the rejections of claims in view of *Schaff* were considered to be persuasive and all rejections pertaining thereto were withdrawn.

Applicants have left the Examiner several phone messages requesting a telephonic interview. It is Applicants' opinion that an interview would be extremely helpful in moving this case to allowance. To date, Applicants have not received a response to their interview request. Applicants would welcome the opportunity for a telephonic interview if amenable to the Examiner.

CONCLUSION

In view of the above Remarks and Claim Amendments, the Applicants submit that all pending claims in the instant application are in condition for allowance. Reconsideration and withdrawal of the objections and rejections is requested and allowance of the claims at an early date is solicited.

Respectfully submitted,

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